

**FIVE-FINGERED WELDING GLOVE**Related Applications

[0001] This application is related to, and hereby incorporates by reference, the following patent applications:

[0002] U.S. Patent Application entitled "THREE-FINGERED WELDING GLOVE", filed on even date herewith and having Application No. \_\_\_\_\_ (Attorney Docket No. GRANP3.001AUS); and

[0003] U.S. Patent Application entitled "FOUR-FINGERED WELDING GLOVE", filed on even date herewith and having Application No. \_\_\_\_\_ (Attorney Docket No. GRANP3.002AUS)

Background of the InventionField of the Invention

[0004] The present invention relates to a five-fingered work glove having a space, and more particularly, to a five-fingered work glove having a space which is manufactured by increasing the number of fingers of a finger piece from 2 to 3 and cutting and sewing the same in a various shapes on an integrated sheet, fitting to various shapes of a work glove used to protect a hand at a work site where a user holds or moves a sharp metal piece or hot metal or high temperature flames spout.

Description of the Related Technology

[0005] In general, a work glove has space in which fingers are inserted by cutting finger portions and sewing with other ends so that a hand is protected during work. The glove is manufactured of a thick leather material exhibiting a superior flame resistance effect to prevent damage or burning of a hand holding or moving a sharp or hot stuff according to the purpose of a work.

[0006] The work glove is manufactured by sewing a finger piece in which a middle finger and a third finger are cut on a palm piece in which a front little finger, a front index finger, and a rear index finger are cut, by being folded in a finger shape, and sewing a

hand's back piece in which a rear middle finger, a rear third finger, and a rear little finger are cut on the sewn palm piece and the end of the finger piece.

#### Summary of Certain Inventive Aspects

[0007] One aspect of the invention provides a five-fingered work glove in which a front finger end, a front index finger, a rear index finger, a rear middle finger, a rear third finger, and a rear little finger are formed into an integrated sheet, a finger piece limited to a front middle finger and a front third finger is formed into the front middle finger, the front third finger, and the front little finger by increasing the number of finger pieces from 2 to 3 in a variety of shapes, and the finger piece is sewn on the integrated sheet, to form the work glove. Thus, the middle finger, the third finger, and the little finger can share a space so that a space is provided between the respective fingers and a free finger motion is available and a pressing and hardening phenomenon between the fingers is removed. Also, a stitch point between rear fingers is moved so that a space between the fingers is secured and a free motion of a finger is available. In addition, a pressing and hardening phenomenon is removed by removing a connection line on the back of a hand and work efficiency is improved.

[0008] Another aspect of the invention provides a work glove including a finger portion and palm portion having a thumb, an index finger, a middle finger, a third finger, and a little finger at one side of a main body of the glove and an opening portion for insertion of a hand formed at the other side thereof, the work glove comprising a palm piece in which a thumb hole is formed at a lower end thereof and a finger end is formed at an upper end thereof, a front index finger and a rear index finger extending from the finger end are integrally formed, and a stitch end is formed at one side end of the rear index finger, a hand's back piece, in which a rear middle finger, a rear third finger, and a rear little finger are integrally formed and a stitch end is formed at one side end of the rear middle finger, sewn with the stitch end of one side end of the rear index finger of the palm piece, a finger piece, in which a front middle finger, a front third finger, and a front little finger are integrally formed, sewn on the finger end of the palm piece, and a thumb piece sewn on the thumb hole of the palm piece.

[0009] At least one rear stitch point between the rear index finger, the rear middle finger, the rear third finger, and the rear little finger is moved upward.

[0010] The finger end of the palm piece is moved upward to the front index finger and a cutting line of the finger piece is moved inwardly so that the length of the finger is shortened.

[0011] The palm piece and the hand's back piece are formed in an integrated sheet.

[0012] At least one rear stitch point between the rear index finger, the rear middle finger, the rear third finger, and the rear little finger is moved upward.

[0013] Another aspect of the invention provides a work glove including a finger portion and palm portion having a thumb, an index finger, a middle finger, a third finger, and a little finger at one side of a main body of the glove and an opening portion for insertion of a hand formed at the other side thereof, the work glove comprising an integrated sheet, in which a thumb hole is formed at a lower end of the palm portion and a finger end is formed at an upper end thereof, and a front little finger, a rear little finger, rear third finger, a rear middle finger, and a rear index finger, which extend from the finger end, are formed sequentially, a finger piece, in which a front index finger, a front middle finger, and a front third finger are sequentially formed, sewn on the finger end of the integrated sheet, and a thumb piece sewn on the thumb hole of the palm portion.

#### Brief Description of the Drawings

[0014] The above and other features and advantages of embodiments of the present invention will become more apparent by describing in detail preferred embodiments thereof with reference to the attached drawings in which:

[0015] FIGS. 1A through 1D illustrate the back of a hand, the palm side of a hand, the cut pattern, and the 3-D shape of a typical glove;

[0016] FIGS. 2A through 2D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to a first preferred embodiment of the present invention;

[0017] FIGS. 3A through 3D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which a stitch point A is moved;

[0018] FIGS. 4A through 4D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which a stitch point B is moved;

[0019] FIGS. 5A through 5D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which a stitch point C is moved;

[0020] FIGS. 6A through 6D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which the stitch points A and B are moved;

[0021] FIGS. 7A through 7D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which the stitch points B and C are moved;

[0022] FIGS. 8A through 8D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which the stitch point A and C are moved;

[0023] FIGS. 9A through 9D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which the stitch point A, B, and C are moved;

[0024] FIGS. 10A through 10D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to a second preferred embodiment of the present invention;

[0025] FIGS. 11A through 11D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which the length of a cuff is increased and a thumb strap is further attached;

[0026] FIGS. 12A through 12D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according

to a third preferred embodiment of the present invention, in which the palm piece and the hand's back piece are formed into an integrated sheet;

[0027] FIGS. 13A through 13D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the third preferred embodiment of the present invention, in which the stitch point A is moved;

[0028] FIGS. 14A through 14D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the third preferred embodiment of the present invention, in which the stitch point B is moved;

[0029] FIGS. 15A through 15D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the third preferred embodiment of the present invention, in which the stitch point C is moved;

[0030] FIGS. 16A through 16D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the third preferred embodiment of the present invention, in which the stitch points A and B are moved;

[0031] FIGS. 17A through 17D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the third preferred embodiment of the present invention, in which the stitch points B and C are moved;

[0032] FIGS. 18A through 18D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the third preferred embodiment of the present invention, in which the stitch points A and C are moved;

[0033] FIGS. 19A through 19D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to the third preferred embodiment of the present invention, in which the stitch points A, B and C are moved; and

[0034] FIGS. 20A through 20D illustrate the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to a fourth preferred embodiment of the present invention, in which the palm piece and the hand's back piece are formed into an integrated sheet.

#### Detailed Description of Certain Embodiments of the Invention

[0035] FIGS. 1A through 1D illustrate a typical welding glove. As shown in FIGS. 1A through 1D, since the typical glove is formed such that the finger piece to be sewn with the palm piece has the middle finger and the third finger only, a space between the fingers is limited so that a space for moving the fingers is small. Thus, during a long-time work, pain occurs in the fingers so that a user cannot wear the glove not fully but loosely or puts the glove off for some time, thus lowering work efficiency.

[0036] Also, the work glove has many sewing lines because it is manufactured by sewing several pieces. Thus, since the glove is thick and rough compared to a normal glove, during a long-time work with wearing the glove, when the user holds an item, the sewing line contacts the hand, thus causing pain, and a finger motion is not natural due to the hard sewing line.

[0037] Referring to FIGS. 2A through 2D, a five-fingered work glove having a space according to a preferred embodiment of the present invention includes a palm piece 400, a hand's back piece 300, a finger piece 500, and a thumb piece 14.

[0038] The palm piece 400 has a thumb hole 1 formed at the lower end thereof and a finger end 11 formed at the upper end thereof and extends from the finger end 11. A front index finger 3 and a rear index finger 4 are integrally formed. A stitch end 5 is formed at the side end of the rear index finger 4.

[0039] A rear middle finger 10, a rear third finger 9, and a rear little finger 8 are integrally formed on the hand's back piece 300. A stitch end 5a is formed at the side end of the rear middle finger 10 so as to be sewn with the stitch end 5 at the side end of the rear index finger 4 of the palm piece 400.

[0040] A front middle finger 6, a front third finger 7, and a front little finger 12 are integrally formed on the finger piece 500 and sewn on the finger end 11 of the upper end of the palm piece 400.

[0041] The thumb piece 14 is sewn on the thumb hole 10 of the palm piece 400. A front surface and a rear surface are integrally cut so that a thumb can be inserted.

[0042] A cuff 600 is further sewn on the lower end of the palm piece 400 so that a five-fingered work glove is manufactured. In one embodiment having the above structure, the finger piece 500 is folded in a finger shape and sewn between the finger end 11 and the front index finger 3 of the palm piece 400. The stitch end 5 of the palm piece 400 and the stitch end 5a of the hand's back piece 300 are sewn fittingly. The thumb piece 14 is sewn on the thumbhole 1 of the palm piece 400 so that a work glove is completed.

[0043] Preferably, the cuffs 600 is sewn in a state in which the palm piece 400 and the hand's back piece 300 are integrally sewn.

[0044] Thus, since the finger piece 500, the middle finger 6, the third finger 7, and the little finger 12 are integrally sewn on the palm piece 400, a space existing only between the middle finger 6 and the third finger 7 expands to a space between the middle finger 6, the third finger 7, and the little finger 12, so that the middle finger 6, the third finger 7, and the little finger 12 share a space. Accordingly, when a user holds or picks an item with wearing the work glove, a finger motion is made free so that fatigue of hand is alleviated and work efficiency is improved.

[0045] A variety of gloves can be manufactured by cutting and sewing the finger piece 500 in various shapes. Various preferred embodiments of the present invention are described below in detail.

[0046] FIGS. 3A through 5D show a five-fingered work glove having a space according to a first preferred embodiment of the present invention, in which stitch points A, B, and C are moved. In the drawings, the stitch point A is a rear stitch point between the rear index finger 4 and the rear middle finger 10, the stitch point B is a rear stitch point between the rear middle finger 10 and the rear third finger 9, and the stitch point C is a rear stitch point between the rear third finger 9 and the rear little finger 8. Reference letter "(a)" is a cutting point of the middle finger 6 and the third finger 7. Reference letter "(b)" is a cutting point of the third finger 7 and the little finger 12.

[0047] As shown in FIGS. 3A through 3D, the front index finger 3 of the palm piece 400 and the middle finger 6 of the finger piece 500 are bent at the same angle. The

finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400 so that a work glove is manufactured.

[0048] Thus, since the rear stitch point A between the rear index finger 4 and the rear middle finger 10 is moved over the first knuckle of the rear finger as much as the angle at which the front index finger 3 of the palm piece 400 and the middle finger 6 of the finger piece 500 are bent, a pressing and hardening phenomenon occurring between the rear index finger 4 and the rear middle finger 10 is removed. Thus, a sense of wearing is improved and fatigue is reduced after a long-time work.

[0049] As shown in FIGS. 4A through 4D, the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 is disposed above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400 so that the work glove is manufactured.

[0050] Thus, since the rear stitch point B between the rear middle finger 10 and the rear third finger 9 is moved over the first knuckle of a rear finger as the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 is disposed above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500, the pressing and hardening phenomenon between the rear middle finger 10 and the rear third finger 9 is removed.

[0051] Also, as shown in FIGS. 5A through 5D, the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 is disposed above the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400 so that the work glove is manufactured. Thus, the rear stitch point C is moved over the first knuckle of the rear finger. As a result, the pressing and hardening phenomenon between the rear third finger 9 and the rear little finger 8 is removed.

[0052] FIG. 6A through 8D show a five-fingered work glove having a space according to the first preferred embodiment of the present invention, in which the stitch points B and C, and the stitch points A and C, are moved.

[0053] As shown in FIGS. 6A through 6D, in the five-fingered work glove of the present preferred embodiment, in which the stitch points A and B are moved, the front index



finger 3 of the palm piece 400 and the middle finger 6 of the finger piece 500 are bent at the same angle. The cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 is disposed above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400 so that the work glove is manufactured.

**[0054]** Thus, since the rear stitch point A between the rear index finger 4 and the rear middle finger 10 is moved over the first knuckle of a rear finger as much as the angle at which the front index finger 3 of the palm piece 400 and the middle finger 6 of the finger piece 500 are bent. Simultaneously, the rear stitch point B between the rear middle finger 10 and the rear third finger 9 is moved over the first knuckle of the rear finger as much as the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 is disposed above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500. Therefore, the pressing and hardening phenomena between the rear index finger 4 and the rear middle finger 10, and the rear middle finger 10 and the rear third finger 9, are removed.

**[0055]** As shown in FIGS. 7A through 7D, in a five-fingered work glove according to the present preferred embodiment, in which the stitch points B and C are moved, both of the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 and the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 are moved above the rear stitch point A so that they are positioned horizontally at the same height. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400 so that the work glove is manufactured. Thus, both stitch points B and C are moved over the first knuckle of the rear finger.

**[0056]** As shown in FIGS. 8A through 8D, in a five-fingered work glove according to the present preferred embodiment, in which the stitch points A and C are moved, the front index finger 3 of the palm piece 400 and the middle finger 6 of the finger piece 500 are bent at the same angle. The cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 is disposed above the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400 so that the work glove is manufactured. Thus, both stitch points A and C are moved over the first knuckle of the rear finger.

[0057] FIGS. 9A through 9D show a five-fingered work glove according to the first preferred embodiment, in which all the stitch points A, B, and C are moved. In the work glove, both of the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 and the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 are moved above the existing position to be horizontal. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400 so that the work glove is manufactured. Thus, all the stitch points A, B, and C are moved over the first knuckle of the rear finger.

[0058] FIGS. 10A through 11D show a work glove having a space according to a second preferred embodiment of the present invention, in which a finger forming portion is very short.

[0059] Referring to FIGS. 10A through 10D, in a cutting pattern of the palm piece 400, the finger end 11 of the palm piece 400 is moved upward to the front index finger 3 and a cutting line of the finger piece 500 is moved inwardly, to be sewn on the hand's back piece 300 so that the glove is manufactured. The inner surface of the finger piece 500 is cut as much as the finger end 11 of the palm piece 400 is moved upward to the front index finger 3. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the palm piece 400. The respective finger forming portions are shortened as much as the finger end 11 is moved upward to the front index finger 3 and the index finger, the middle finger, the third finger, and the little finger of a glove are all formed. Thus, a user wearing the glove holds and picks an item without difficulty. Since a sufficient space is secured between the fingers, the pressing and hardening phenomenon is removed.

[0060] Referring to FIGS. 11A through 11D, in the work glove having a space according to the second preferred embodiment of the present invention, the work glove can be used as a welding glove by increasing the length of the cuffs 600 and attaching a thumb strap 15 around the thumb. The thumb strap 15 is attached to a sewing portion of the thumb piece 14 which is sewn on the thumb hole 1 of the palm piece 400 so that unsewing is prevented during work. Also, since the sewing thread is not burnt by high-temperature flames so that a hand can be protected.

[0061] FIGS. 12A through 12D show a five-fingered glove having a space according to a third preferred embodiment of the present invention, in which a palm piece and a hand's back piece are formed in an integrated piece.

[0062] As shown in FIGS. 12A through 12D, a five-fingered work glove having a space according to a third preferred embodiment includes an integrated sheet 700 in which the palm piece 400 and the hand's back piece 300 are integrally formed.

[0063] The integrated sheet 700 is formed in the size and shape such that the stitch end 5 formed at the side end of the rear index finger 4 of the palm piece 400 and the stitch end 5a formed at the side end of the rear middle finger 10 of the rear piece 300 are removed or combined together. Thus, a sewing line existing for the sewing of the palm piece 400 and the hand's back piece 300 is removed and they are formed integrally, so that the pressing and hardening phenomenon is removed.

[0064] FIGS. 13A through 15D show a five-fingered glove having a space according to the third preferred embodiment of the present invention, in which the stitch points A, B, and C are moved.

[0065] As shown in FIGS. 13A through 13D, the five-fingered work glove having a space according to the third preferred embodiment is manufactured by bending the front index finger 3 of the integrated sheet 700 and the middle finger 6 of the finger piece 500 at the same angle, and folding the finger piece 500 in a finger shape and sewing the folded finger piece 500 on the finger end 11 of the integrated sheet 700, so that the work glove is manufactured.

[0066] Thus, the rear stitch point A between the rear index finger 4 and the rear middle finger 10 is moved over the first knuckle of the rear finger as much as the angle at which the front index finger 3 of the integrated sheet 700 and the middle finger 6 of the finger piece 500 are bent, the pressing and hardening phenomenon occurring between the rear index finger 4 and the rear middle finger 10 is removed. Thus, a sense of wearing is improved and fatigue is reduced after a long-time work.

[0067] As shown in FIGS. 14A through 14D, the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 is disposed above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the integrated piece 700 so that the

work glove is manufactured. Thus, the rear stitch point B between the rear middle finger 10 and the rear third finger 9 is moved over the first knuckle of a rear finger as the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 is disposed above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500.

**[0068]** As shown in FIGS. 15A through 15D, the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 is disposed above the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the integrated piece 700 so that the work glove is manufactured. Thus, the stitch point C between the rear third finger 9 and the rear little finger 8 is moved over the first knuckle of a rear finger.

**[0069]** FIGS 16A through 16D show a five-fingered glove having a space according to the third preferred embodiment of the present invention, in which the stitch points A and B are moved.

**[0070]** As shown in FIGS. 16A through 16D, the five-fingered work glove having a space according to the third preferred embodiment is manufactured by bending the front index finger 3 of the integrated sheet 700 and the middle finger 6 of the finger piece 500 at the same angle, disposing the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500, and folding the finger piece 500 in a finger shape and sewing the folded finger piece 500 on the finger end 11 of the integrated sheet 700, so that the work glove is manufactured.

**[0071]** That is, since the rear stitch point A between the rear index finger 4 and the rear middle finger 10 is moved over the first knuckle of a rear finger as much as the angle at which the front index finger 3 of the integrated sheet 700 and the middle finger 6 of the finger piece 500 are bent. Simultaneously, the rear stitch point B between the rear middle finger 10 and the rear third finger 9 is moved over the first knuckle of the rear finger as much as the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 is disposed above the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500.

**[0072]** Thus, the pressing and hardening phenomena between the rear index finger 4 and the rear middle finger 10, and the rear middle finger 10 and the rear third finger 9,

are removed. Also, sense of wearing is improved and fatigue is reduced after a long-time work.

**[0073]** Referring to FIGS. 17A through 17D, in a five-fingered work glove according to the third preferred embodiment, in which the stitch points B and C are moved, both of the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 and the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 are moved above the rear stitch point A so that they are positioned horizontally at the same height. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the integrated sheet 700 so that the work glove is manufactured. Thus, both stitch points B and C are moved over the first knuckle of the rear finger.

**[0074]** As shown in FIGS. 18A through 18D, in a five-fingered work glove according to the third preferred embodiment, in which the stitch points A and C are moved, the front index finger 3 of the integrated sheet 700 and the middle finger 6 of the finger piece 500 are bent at the same angle. The cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 is disposed above the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the integrated sheet 700 so that the work glove is manufactured. Thus, both stitch points A and C are moved over the first knuckle of the rear finger.

**[0075]** FIGS. 19A through 19D show a five-fingered work glove according to the third preferred embodiment, in which all the stitch points A, B, and C are moved. In the work glove, the front index finger 3 of the integrated sheet 700 and the middle finger 6 of the finger piece 500 are bent at the same angle. Both of the cutting point (a) of the middle finger 6 and the third finger 7 of the finger piece 500 and the cutting point (b) of the third finger 7 and the little finger 12 of the finger piece 500 are moved above the existing position to be horizontal. The finger piece 500 is folded in a finger shape and sewn on the finger end 11 of the integrated sheet 700 so that the work glove is manufactured. Thus, all the stitch points A, B, and C are moved over the first knuckle of the rear finger.

**[0076]** FIGS. 20A through 20D show the back of a hand, the palm of a hand, the cutting pattern, and the 3-D shape of a five-fingered work glove having a space according to a fourth preferred embodiment of the present invention, in which the palm piece and the hand's back piece are formed into an integrated sheet.

[0077] Referring to FIGS. 20A through 20D, the five-fingered work glove according to a fourth preferred embodiment of the present invention includes an integrated sheet 700a in which the finger end, the front little finger 2, the rear little finger 8, the rear third finger 9, the rear middle finger 10, and the rear index finger 4 are integrally formed and a finger piece 500a in which the index finger 13, the middle finger 6, and the third finger 7 are formed. The finger piece 500a is folded in a finger shape and sewn on the finger end of the integrated sheet 700a, so that the work glove is manufactured.

[0078] As in the third preferred embodiment, instead of separating the palm piece 100 and the hand's back piece 300 to be used as the integrated sheet 700a, the front index finger 13 and the rear index finger 4 are sewn together so that a sewing line at the outer side of a hand is removed. Accordingly, the pressing and hardening phenomenon due to the hard sewing line is removed. Therefore, after long-time work at a site where a user works with the outer side of a hand contacting the floor, pain of hand is removed and fatigue of hand is reduced.

[0079] Although the above preferred embodiments relate to a work glove, the embodiments of the present invention can be applied to a welding glove by increasing the length of the cuffs 600 and attaching the thumb strap 14. Also, the present invention may cover all areas which can be easily conceived by those skilled in the art to which the present invention pertains.

[0080] As described above, according to at least one embodiment of the present invention, a five-fingered work glove having a space is manufactured by increasing the number of fingers of a finger piece from 2 to 3 and cutting and sewing the same in a various shapes on an integrated sheet, fitting to various shapes of a work glove used to protect a hand at a work site where a user holds or moves a sharp metal piece or hot metal or high temperature flames spout. Thus, a stitch point between rear fingers is moved so that a space between the fingers is secured and a free motion of a finger is available. In addition, a pressing and hardening phenomenon is removed by removing a connection line on the back of a hand and work efficiency is improved.

[0081] While this invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art

that various changes in form and details may be made therein without departing from the spirit and scope of the invention as defined by the appended claims.